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THE FUTURE OF THE PLAINS

The following analysis by James Alcott, Director, Economic Development Division, Midwest Research Institute, Kansas City, is condensed from his report to the 21st annual meeting of the Board of Trustees of that organization and reprinted by permission. The 1975 projections of population and economic activity are based on forecasts by the National Planning Association Center for Economic Projections, Washington, D.C.

The logical starting point for a regional analysis of this kind is with population, because people are both the basic ingredient and the object of economic growth. The six states selected for this study - Nebraska, Iowa, Kansas, Missouri, Oklahoma, and Arkansas - have grown, and will continue to grow, less rapidly than the rest of the nation. A significant point to note, however, is that the rate of growth is increasing, while the rate of growth for the nation as a whole is not. During the 1950's, they grew at about 0.6 per cent annually, less than one-third the national rate. During the 1960's and 1970's, the rate should be nearly one percent annually, which is two-thirds the national rate, and, on a relative basis,

RANK OF POPULATION GROWTH

1950-'60	Nationally	1960-'70	Nationally
1. Kansas	25	1. Nebraska	28
2. Missouri	34	2. Kansas	30
3. Nebraska	38	3. Missouri	33
4. Oklahoma	40	4. Oklahoma	38
5. Iowa	41	5. Iowa	43
6. Arkansas	48	6. Arkansas	48

twice as fast as the growth of the 1950's.

Nebraska will have the highest growth rate of these states between now and 1975, and it is the only state to better its rank among the 50 states appreciably in terms of growth rate. Arkansas will have the lowest growth rate, and its rank is unchanged. The most populous state of the six, Missouri, will have just over two percent of the nation's population in 1975. Nebraska, the smallest, will still have under one percent.

POPULATION GROWTH ANALYZED

In the period 1950-1960, the region had a population increase of about 900,000 persons. Had we grown at the overall national rate, the increase would have been three times as great. By the early 1970's, the gap will have been narrowed somewhat. If these states were to equal the national growth rate, the population would be up by 3.6 million. The projections are that the increase will be just over 2 million. The relative gap, then, is 1.6 million over the 15-year period, whereas at one time it was 2.5 million in the 10-year span between 1950 and 1960.

The great demographic trends today have to do with urbanization and with age composition. The midwest has been lagging the nation in urbanization, but it is now catching up. In 1960, the six states were only 58 percent urban, compared with 70 percent for the nation. By 1975, they should be 66 percent urban versus 76 percent for the country as a whole. The greatest relative urban growth will take place in the least urbanized state of the region, Arkansas; and the smallest urban growth will be in Missouri, the most urban of these states.

PERCENTAGE OF URBAN POPULATION

	1960	1975
Kansas	61%	70%
Missouri	67%	72%
Iowa	53%	60%
Nebraska	54%	63%
Oklahoma	63%	71%
Arkansas	43%	54%
Region	58%	66%
Nation	70%	76%

This growth will occur in existing urban areas and mostly in the suburban areas of the larger cities. It will be marked in many of the smaller cities of the region such as Springfield, Missouri, and Fort Smith, Arkansas, both of which have developed as major distribution and industrial centers. It also will occur in such college towns as Ames and Stillwater, and in state capitals such as Lincoln and Topeka. This growth will spell private opportunities - in housing and land development, shopping centers, banks. And it also spells public problems - the extension of utilities, services, schools, and other government functions.

The midwest has a rather "expensive" age distribution in its population. The bulk of the population will be under 25 and over 65; groups requiring major public expenditures, but of different kinds. The area distribution differs most significantly from the national in the older age bracket. In 1975, the six-state region will have a larger proportion of its population in this group than will the U. S.

One of the great problems of this part of the country is a perennial exodus of younger people. It shows up dramatically most often in the ranks of the college graduates. In these six states 70 percent of the graduating engineers at the bachelor's degree level leave their "home" state for employment elsewhere.

In the 35-44 age group, the midwest will show a decrease of 280,000 between 1950 and 1975, while the nation will decrease 1.8 million. This hollow reflects two factors: the low birth rates of the 1930's, and, in the midwest, the past-exodus of younger people. Since it is in this age group that industry looks for its future executives, changes in management staffing philosophies will be necessary, especially in the midwest.

(Continued on page 4)

Business Summary

Nebraska's dollar volume of business in October increased 6.5% from October, 1965 and the physical volume increased 5.9%. Comparable figures for the U.S. were 8.6% and 5.5% respectively. Dollar volume changes from September, 1966 were -4.6% (Nebr.) and -0.3% (U.S.) with changes in physical volume of -2.1% (Nebr.) and +0.3% (U.S.). All of the Nebraska indicators, with the exception of construction activity (-3.1%) and life insurance sales (-2.4%), increased from a year ago with cash farm marketings (+23.7%) showing the greatest increase. In the U.S., construction activity (-6.0%) was the only indicator showing a decrease.

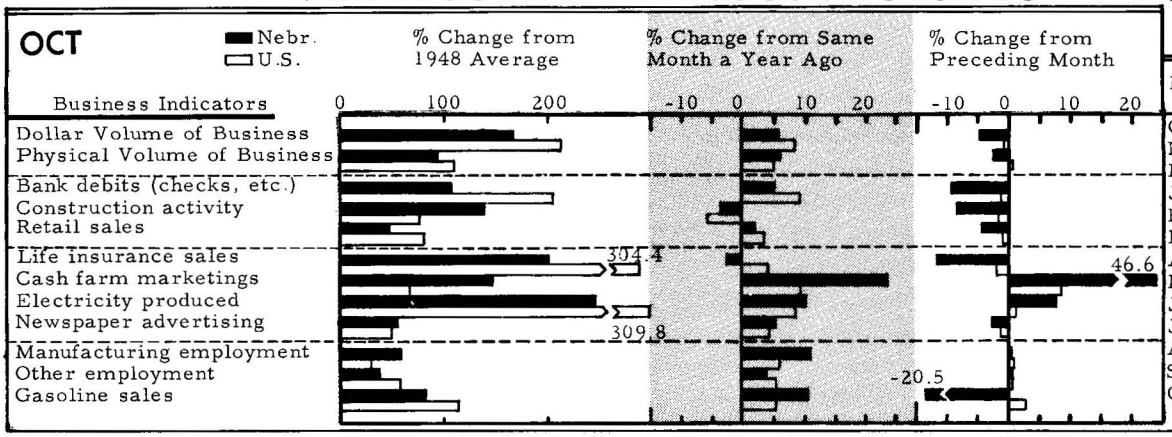
Nebraska's retail sales in November increased 10.0% from November, 1965. The month-ago change, seasonally adjusted, was +4.1%. Of the individual sales categories, building material (-9.7%) and drug stores (-0.3%) were the only categories decreasing from last year. Farm equipment sales, up 34.4%, showed the largest increase. Of the twenty-two reporting cities, thirteen increased from last year with seven of these having increases greater than 10%. Only five cities decreased from October, 1966.

Indexes of city business indicators rose in 21 of 22 cities over last year. The state index was 9.2% above November, 1965.

All figures on this page are adjusted for seasonal changes, which means that the month-to-month ratios are relative to the normal or expected changes. Figures in Chart I (except the first line) are adjusted where appropriate for price changes. Gasoline sales for Nebraska are for road use only; for the United States they are production in the previous month.

E. L. BURGESS

I. NEBRASKA and the UNITED STATES



II. PHYSICAL VOLUME OF BUSINESS
% of 1948 Average

Month	Nebr. 1965-6	U.S. 1965-6
Oct.	179.9	198.8
Nov.	179.6	200.4
Dec.	188.1	203.6
Jan.	182.5	207.2
Feb.	194.0	207.6
Mar.	193.9	210.3
Apr.	190.3	209.0
May	186.5	206.0
June	198.0	209.9
July	197.7	210.5
Aug.	197.8	208.4
Sept.	194.8	208.6
Oct.	190.6	209.2

III. RETAIL SALES for Selected Cities. Total, Hard Goods, and Soft Goods Stores. Hard Goods include automobile, building material, furniture, hardware, equipment. Soft Goods include food, gasoline, department, clothing, and miscellaneous stores.

NOV City	No. of Reports*	Per Cent of Same Month a Year Ago: Total	Hard Goods	Soft Goods	Per Cent of Preceding Month: Total	NOV City	No. of Reports*	Per Cent of Same Month a Year Ago: Total	Hard Goods	Soft Goods	Per Cent of Preceding Month: Total
THE STATE	919	110.0	111.2	106.9	104.1	Fremont	33	84.9	83.3	86.3	100.1
						Fairbury	28	98.9	97.1	100.4	108.5
Omaha	98	99.1	91.3	105.6	105.3	Norfolk	37	105.4	106.3	104.8	100.7
Lincoln	91	101.6	103.3	100.2	103.6	Scottsbluff	36	111.0	120.9	102.5	105.5
Grand Island	36	114.2	112.6	115.7	102.1	Columbus	29	104.4	93.5	114.2	109.7
Hastings	34	95.5	97.6	93.7	103.1	McCook	24	113.3	105.1	120.0	110.0
North Platte	22	101.3	87.1	111.2	96.7	York	34	104.8	108.1	102.1	117.1

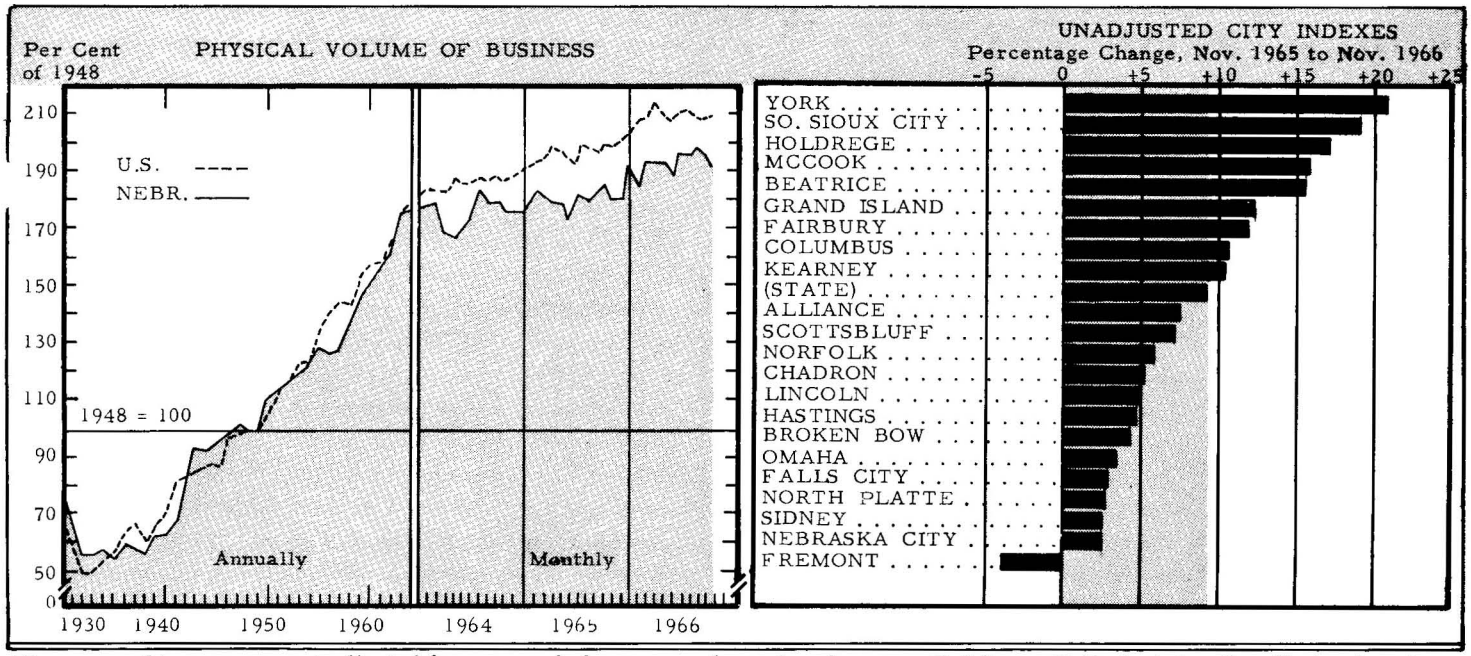
IV. RETAIL SALES, Other Cities and Rural Counties

NOV Locality	No. of Reports*	Per Cent of Same Month A Year Ago	Per Cent of Preceding Month
Kearney	21	111.4	102.9
Alliance	29	111.0	110.5
Nebraska City	23	111.1	115.6
Broken Bow	17	99.1	109.7
Falls City	16	97.3	97.7
Holdrege	23	108.2	96.4
Chadron	25	96.2	84.8
Beatrice	19	92.4	102.5
Sidney	22	93.0	95.8
So. Sioux City	15	115.1	106.0
Antelope	13	122.5	92.3
Cass	27	99.2	103.6
Cuming	16	102.1	79.0
Sand Hills**	27	103.7	100.1
Dodge***	11	111.4	124.5
Franklin	10	107.3	122.9
Holt	14	130.1	121.4
Saunders	18	109.9	110.8
Thayer	10	95.4	93.8
Misc. Counties	61	114.3	98.0

V. RETAIL SALES, by Subgroups, for the State and Major Divisions

NOV Type of Store	Per Cent of Same Month a Year Ago: Nebraska	Omaha and Lincoln	Other Cities	Rural Counties
ALL STORES****	110.0	101.7	106.9	121.2
Selected Services	107.5	98.5	117.8	106.1
Food stores	109.5	107.7	109.5	111.2
Groceries and meats	112.9	111.0	114.3	113.5
Eating and drinking pl.	104.3	103.3	100.9	108.8
Dairies and other foods	104.1	101.2	106.2	104.8
Equipment	114.2	90.3	98.5	153.8
Building material	90.3	83.4	87.5	100.1
Hardware dealers	104.3	97.8	108.0	107.2
Farm equipment	134.4	86.8	95.2	221.3
Home equipment	102.2	95.3	106.2	105.2
Automotive stores	105.9	102.9	106.2	108.7
Automotive dealers	107.4	103.6	106.0	112.7
Service stations	104.0	100.1	107.3	104.7
Miscellaneous stores	105.0	98.1	107.3	109.6
General merchandise	100.5	92.8	99.6	109.2
Variety stores	105.0	100.1	109.2	105.7
Apparel stores	105.7	98.4	107.7	110.9
Luxury goods stores	112.7	106.0	110.4	121.7
Drug stores	99.7	97.2	99.3	102.2
Other stores	114.8	104.1	132.2	109.1
Liquor stores	102.9	99.7	108.5	104.7

*Not including liquor stores ***Outside Principal City ****Not including Selected Services and Liquor Stores
**Including Hooker, Grant, Dawes, Cherry, and Sheridan Counties



Figures on this page are not adjusted for seasonal changes nor for price changes. Building activity includes the effects of past as well as present building permits, on the theory that not all building is completed in the month the permit is issued. E. L. B.

VI. CITY BUSINESS INDICATORS

NOV

Per Cent of Same Month a Year Ago

State or City	City Index	Bank Debits	Building Activity	Retail Sales	Electricity Consumed	Gas Consumed	Water Pumped	Postal Receipts	Newspaper Advertising
The State	109.2	107.4	65.0	110.0	108.4	111.0	95.4	110.1	110.4
Beatrice	115.6	101.2	141.7	92.4	114.8	112.5	132.0	111.6	123.3
Omaha	103.5	105.9	71.8	99.1	107.8	101.5	97.6	109.8	107.6
Lincoln	105.0	104.4	39.4	101.6	107.5	108.9	100.9	118.8	106.3
Grand Island	112.4	114.6	37.1	114.2	118.0	137.6	102.2	105.3	- - -
Hastings	104.9	106.6	72.7	95.5	95.8	120.8	113.5	104.8	112.5
Fremont	96.0	109.0	57.7	84.9	NA	NA	106.3	96.8	NA
North Platte	102.8	104.8	65.8	101.3	103.2	126.9	98.0	109.9	101.8
Kearney	110.5	107.4	62.3	111.4	112.7	125.6	107.5	115.4	NA
Scottsbluff	107.2	108.0	31.9	111.0	109.8	139.9	133.2	100.1	83.0
Norfolk	105.7	92.4	70.9	105.4	112.7	119.1	108.9	95.7	124.1
Columbus	110.6	109.3	65.1	104.4	113.0	121.3	114.0	107.4	112.8
McCook	115.7	116.0	18.0	113.3	117.9	126.5	NA	107.0	123.3
Sidney	102.6	91.8	88.7	93.0	108.2	124.5	139.2	106.5	NA
Alliance	107.5	106.1	82.1	111.0	113.9	144.4	94.2	99.0	113.8
Nebraska City	102.6	120.9	70.8	111.1	107.2	NA	107.1	84.8	NA
So. Sioux City	119.2	138.5	445.4	115.1	114.2	101.7	NA	109.0	NA
York	120.8	121.8	171.9	104.8	105.4	122.5	116.6	122.5	- -
Falls City	102.9	104.0	94.6	97.3	98.9	115.4	101.3	107.4	116.6
Fairbury	111.8	113.3	22.7	98.9	113.1	121.9	98.9	125.3	131.3
Holdrege	117.2	NA	346.8	108.2	109.2	139.7	111.9	101.7	NA
Chadron	105.1	107.6	94.7	96.2	110.1	133.3	97.7	143.8	NA
Broken Bow	104.3	115.7	102.3	99.1	107.8	139.8	99.3	95.3	107.7

NOV

Per Cent of Preceding Month (Unadjusted)

State or City	City Index	Bank Debits	Building Activity	Retail Sales	Electricity Consumed	Gas Consumed	Water Pumped	Postal Receipts	Newspaper Advertising
The State	99.9	103.2	94.9	101.1	100.4	134.3	81.7	93.9	106.4
Beatrice	102.5	102.1	91.3	99.7	109.8	162.2	86.9	98.5	116.8
Omaha	100.4	103.6	97.8	101.4	99.0	111.9	88.3	107.4	97.3
Lincoln	101.0	100.6	103.5	100.0	100.3	150.1	76.4	78.3	113.5
Grand Island	105.7	98.7	113.7	98.9	103.1	199.5	88.2	116.8	- - -
Hastings	101.2	112.2	97.2	99.6	91.0	177.2	73.5	99.4	108.5
Fremont	101.9	102.7	94.6	96.8	113.5	NA	87.3	124.4	NA
North Platte	98.6	99.8	81.1	93.6	95.7	175.3	44.3	122.6	105.1
Kearney	94.6	104.2	79.7	99.8	78.9	152.0	65.0	110.8	NA
Scottsbluff	102.4	111.1	90.7	101.7	129.1	165.3	95.6	89.0	101.3
Norfolk	100.0	104.1	84.0	97.4	126.1	159.2	77.7	87.1	111.6
Columbus	104.8	98.6	106.9	106.1	107.7	163.8	74.6	96.5	107.4
McCook	102.8	102.9	84.4	106.0	99.6	192.9	NA	83.5	130.9
Sidney	102.6	92.9	98.4	93.0	116.3	182.2	78.7	134.6	NA
Alliance	109.9	111.8	106.7	110.5	109.6	226.5	61.4	119.8	107.7
Nebraska City	94.6	96.7	86.2	112.2	100.0	NA	93.1	88.8	NA
So. Sioux City	101.3	101.9	97.4	101.9	107.1	65.9	NA	104.0	NA
York	104.6	103.0	87.2	112.2	94.3	158.2	87.2	111.5	- -
Falls City	101.9	113.7	106.6	95.1	99.4	145.6	89.6	96.0	105.6
Fairbury	102.8	120.1	88.8	104.5	100.0	139.3	88.9	113.1	93.8
Holdrege	104.0	116.2	161.9	94.0	97.6	212.8	63.9	98.2	NA
Chadron	111.3	122.2	77.2	82.1	105.8	154.5	NA	135.0	NA
Broken Bow	100.1	99.0	99.0	106.4	100.0	183.3	77.3	99.1	102.3

l from first page)

ECONOMIC ACTIVITY CHANGING

ıomic activity of the national population has been under-
e basic and dramatic changes since World War II, as the
ıoved more toward a service economy. In 1950, 46 per-
working population was engaged in making and producing
agriculture, mining, construction, and manufacturing.
ıe proportion had dropped to 40 percent, and by 1975 it
down to 34 percent.

rs from now, the economy of the midwest will resemble
ely the economy of the entire country, as manufacturing
to grow and agriculture to decline on a relative basis.
ɛst, however, exhibits some significant differences from
al pattern. It is moving in the same direction as the
nation in all categories but one. While the proportion of
nt in manufacturing will decline slightly for the country
ɛ, the midwest will actually increase its proportion of
the production line. Other large increases, in absolute
ll be in government employment, particularly at state
evels, and in services of all kinds. The only significant
will be in agriculture, which will drop from 18 percent of
/estern employment in 1960, to about 10 percent in the
s.

:he 1950's only Kansas tended to have industry growth
eding the national rates for the same industries. During
and 1970's the performance of these six states will ex-
ational level in manufacturing, agriculture, mining, and
:onstruction. Manufacturing is especially important
the sizable increase in jobs. Agriculture will actually
r jobs than the national trend would indicate. On the
l, a relatively poor performance in the trade, services,
ıment sectors will be obscured by fairly sizable absolute
in employment.

ver to a key question, especially for this region, should
.uch more apparent in the next decade. The question
ill the decline in agricultural employment bottom out?
tion of people from the farms has already been tremen-
both the national and world demand for food is increas-
.y, so it would seem that the two trend lines will meet.
ix states Iowa should have the smallest further decline
.ural employment.

PRODUCTIVITY MOVES HIGHER

nomic structure of the region - measured by output -
ɔse resemblance to the composition of employment, but
s in productivity among various activities give rise to
significant differences. Between 1960 and 1975, for
he U.S. gross national product should increase over 80
ith an employment gain of only 29 percent. Gross prod-
ting in the midwest should increase by some 75 percent,
ployment gain of only 16 percent. The greatest increase
originating in the midwest will be in manufacturing,
y transportation, communications, public utilities, and
ıctivities. In each of these, new plant and equipment
quired, resulting in a more efficient and modern mid-
oductive base. The smaller part of output growth will
rnment and services - both labor intensive activities -
luctivity is traditionally low.

INCOME INCREASING SLOWLY

ployment and production will produce a total personal
ncreasing magnitude, but an income which, like popula-
tion, is increasing at a slower rate than that of the U.S. The s
with per capita income is more encouraging. Average per c
income (figured in constant dollars) will increase from $2,0
$3,000 annually - 50 percent - between 1960 and 1975. Th
about the same dollar increase as is expected nationally, but
still leave the average income about $400 below the average
level.

No state in the region will have an average per capita inc
higher than the U.S. average of $3,400 in 1975, although both
souri and Kansas will be less than $100 away from this m
mark.

As in the past decade, these kinds of increases spell very
stantial growth in discretionary income - the dollars availab
spend over and above basic necessities. These are the do
that create the huge demand for recreation, travel, education,
tural activities, and investment programs. They have cre
the "second market" - the market for the second car, the se
house, the second television, and all the rest.

Today, a family with an income of less than $3,000 a ye
considered to be living in poverty. Within ten years this $
figure (adjusted for inflation) will be standard for each pe
in this region. On a family basis, average income will be
$10,000.

The proportion of personal income derived from wages and
aries in the midwest will increase as the shift out of agricu
continues. A second significant shift upward will occur in tra
payments - income largely derived from government in the
of welfare payments and social security benefits. This m
increased demands on state and local governments, whose f
resources are already strained.

ANALYSIS SUMMARIZED

What are the summary points from all this?

The region will continue to see a great growth in urban deve
ment.

There will be a shift into manufacturing activities, and the
out of agriculture will continue.

The region will experience a large growth in gross reg
product, but a relatively small increase in employment.

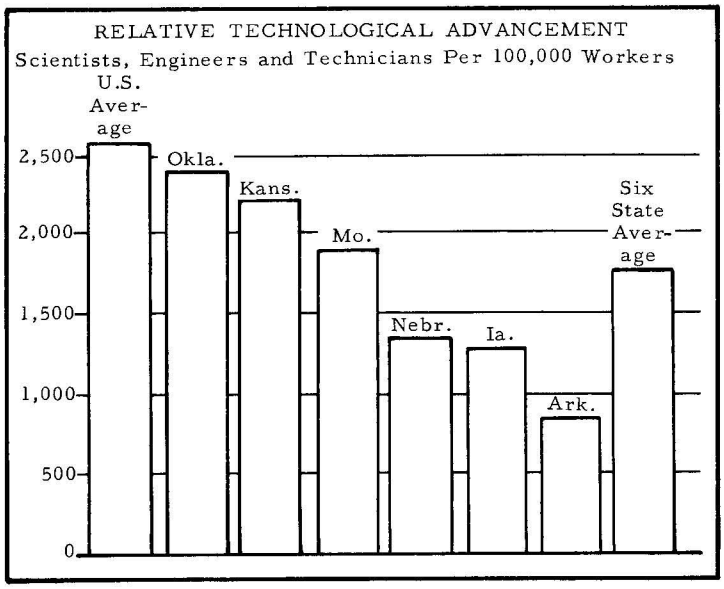
Population growth will be concentrated at both ends of the
distribution, with a relative shrinkage in the middle.

Population growth in the next 10 years should be better than
of the 1950's by a factor of two, although it will still trail the
averages in most cases.

In looking for the reasons why, it is not easy to pinpoint ca
factors. One obvious problem is the heavy concentration in
culture, an industry which is losing employment and which sl
only a modest growth in value. Another set of factors is th
wholesale and retail trade (which was our largest employ
segment in 1960), the midwest is growing at a rate slower tha
national average. In services and government, the most ra
growing employer categories, the midwest is growing at a
well below average.

ROLE OF TECHNOLOGY

Technology is a major determinant of economic growth,
much of the concern about slow growth in the midwest has prop
focused on this factor. The technical base of the midwest is
as well developed as that in most other regions, and it shoul
instructive to see what the reasons are. One major factor i
relative absence of industry which by its nature employs l
numbers of scientists and engineers - electronics, aerosp



pharmaceuticals. But equally important is the fact that industry in the midwest - regardless of kind - employs these technical people in lower ratios than its counterpart in other regions. Half of the deficit is caused by this under-utilization of technical talent. An important consequence of the low technical base is a regional inability to retain or attract the technical people needed.

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There is no question that our region has failed to participate fully in the unprecedented economic growth of the United States during the last two decades. The indicators now show that our pattern of economic growth will move more closely to the national pattern over a period of time. This should provide an opportunity for the astute, well-informed observer to profit both from the mistakes and the advances elsewhere and to plan profitably for the future.

Reviews

The Small Community Faces the Development Maze; the Search for a Coordinated, Effective Program, Stanley Renas, Georgia State College Supplement to the Atlanta Economic Review, Atlanta, Georgia, 1966. Paperback. $1.00.

Modernizing Local Government, a Statement on National Policy, Research and Policy Committee, Committee for Economic Development, New York, 1966. $1.00.

Although the studies listed above have quite different titles, and although each has a different approach to the problem, both books focus attention on the need for elimination of obsolete local governments and the equally urgent need for modernization of functional local units.

The study on small communities does not pretend to be definitive, but it has special merit, as has the CED study, in its description of the functional community and in its emphasis on the need for political boundaries determined by economic and sociological considerations. The author believes that lines of demarcation should be influenced by the problems of living and earning a living, rather than vice versa.

The need for an effective system of local government is emphasized also in the CED book. This study advocates major reforms which would reduce the present 80,000 local governments to no more than 16,000 and would revamp the 50 state constitutions to provide for boundary revisions, extensions of legal authority, and elimination of needless government units. This would in turn curtail the overlapping layers of local government now found in most states.

The small community decline problem in Georgia discussed in the book by Professor Renas does not appear to differ significantly from the problem in Nebraska, for both states are undergoing a constant polarization process with the cities growing relatively rapidly while many small communities are gradually disintegrating.

Nebraska small communities which have sought help in attempting to solve their problems have discovered as has Mr. Renas that "Parkinson's Law of the Rising Pyramid apparently applies to the proliferation of agencies that are attempting to minister to the ills of the declining community." It sometimes appears that federal and state agencies have a myriad of competing or overlapping programs; hence there is need to inventory and evaluate the types of information, research, and planning activities that are now available from state agencies and private groups, and to make detailed recommendations on the way in which a comprehensive and coordinated statewide planning program to meet the needs of small communities can be carried out.

Although coordination between agencies is needed, the study points out that this is only one of many factors affecting failure of the small community to improve itself. Nebraska researchers, as well as Georgians, have found that the move for improvement must originate with the community seeking help rather than from the agency providing help. A further consideration is that the community must have a function; that is, a small community will die if its present contribution to society is no longer needed and if it fails to find a new function for which society is willing to pay.

The imperative need for functional organization is emphasized in both studies, but is more definitively analyzed in the CED study which makes nine specific proposals for reform of obsolete local governments.

D. S.

Customer Services, Karl Morrison, Economics Faculty Publication, University of Mississippi, University, Miss., 1966. Paperback. $1.00.

Businessmen engaged in retail operations as well as students of retailing will be interested in Dr. Morrison's penetrating analysis of the implications and costs of the numerous types and variations of customer services offered by retail establishments.

In discussing trends in retailing, the author predicts that the next decade will be a period of increasing competitive experimentation and that probably tradition will continue to lose influence as a determinant of customer service offerings. He believes that more

efforts will be made to find out how many customers actually use specific services, how often they use them, and how insistent they are that specified services be available. Dr. Morrison believes further that more care will be used to find out what direct and imputed costs are attributable to specified customer services - and what values.

Retailers will be interested in the author's careful analysis of the pressures toward increasing customer services. He points out, however, that in the same markets and often among the same kinds of stores there will also be strong pressures toward curtailing services because rising operating costs will squeeze margins in many cases already so narrow that the search for means of reducing or controlling costs exhibits an air of desperation.

Accepting the assumption that a retailer's principal business is the sale of services, - an assumption with which not everyone will agree - the author contends that every service should be considered to be on trial constantly and should be discarded unless there is reasonable evidence that the value it contributes at least equals its cost. He emphasizes that every service is expensive, that customer demand for specific services is frequently overestimated, and that equity requires that the costs of services should be borne as nearly as possible by those who use them. In many cases price structures exhibit a considerable degree of rigidity and retailers find it inexpedient to set prices much different from those charged by their competitors. For many retailers, services thus become the real battle line in their fight for survival and success.

According to the author the principal factors which tend to determine service policies and practices are: cost compared to benefit, customer preference, store character, strategy, merchandise, competitors, and changes in service demands.

D. S.

Store Location and Customer Behavior (Technical Bulletin 56), Claude and Nina J. Gruen, co-authors, Urban Land Institute, Washington, D.C., 1966. $3.00.

A Programmed Solution for Approximating an Optimum Retail Location, David L. Huff, Reprint No. 12, Center for Regional Studies, University of Kansas, Lawrence, Kansas, 1966. No charge.

Because of the growing concentration of population and greatly increased costs of starting up business, the right spot for a new store has become even more of a "make-or-break" decision for retailers than it was in the past.

The two studies here reviewed present techniques for approximating an optimum location of a proposed retail development. Although the techniques are different, both take into account customer behavior and consumer demand in relationship to retail location.

The Gruens propose thorough investigation to be done through questionnaires and personal interviews, and conversion of customer forecasts into sales forecasts. Dr. Huff presents a computer-programmed solution for the problem which involves calculating, for a set of potential locations, the net operating profit of each and then selecting from among this set that particular location at which the net operating profit is greatest.

Dr. Gruen, an urban economist on the senior staff of the San Francisco office of a consulting firm, Arthur D. Little, Inc., and Mrs. Gruen, a consulting social psychologist to the same firm, have devised a new approach to locating retail facilities which is based on analyzing the behavior of specific groups most likely to be attracted by a retailer.

Until recently the relationship between consumer residence and locational accessibility of the store has formed the basis for making retail location decisions. The Gruens found, however, t locational decision creates a situation that gradually chan retailer's identity, it will alter his ability to attract custom all of his locations. The retailer must, therefore, conside effect today's decisions may have on his future retailing id

Successful store location, according to the Gruens, involv phases:

1. Definition of the customer base. Questionnaire data an able research techniques are used to identify customer potential and actual.
2. Determination of retailer's identity from inferences, ca drawn from customers' socio-economic characteristics
3. Investigation of shopping habits and preferences. Inte of a group having the socio-economic characteristics retailer's customers are conducted to determine (1) h ferent specific locations affect them, (2) what impact ea would have on how the customer "sees" the retailer, a how the attraction of the shopping location will be cha the retailer moves there.
4. Forecasting number of customers. The information dev through phases 1-3 is used to define appropriate market for each site, and a demographic analysis is then made c market area.
5. Conversion of customer forecasts into sales forecasts. tical information about the retailer's sales experience i to make forecasts as to future development.

Dr. Huff set up a model for a case study and used a cor program that possessed sufficient capability to search an city for an optimum location. The basic information nec for analyzing the problem involved 11 categories, and 10 seq steps were programmed in analyzing the information.

The probability model is presented as a simple but effecti for estimating sales of prospective retail firms and Dr. Huf that through use of this tool and the assistance of a compute possible to search a very large geographical area for an op retail location.

It appears that estimates stemming from such investi would provide investors with a more rational basis of de than they have had before. In hope of optimum returns fron investment, retailers may find that the Gruen approach to th tion problem, complicated though it may appear to be, may worth the effort involved, and that Dr. Huff's computer-progr solution provides a powerful tool for decision making.

WORD RECEIVED OF DEATH OF DR. T. BRUCE RC

Dr. T. Bruce Robb, who was chairman of the Departn Business Research at the University from 1924 to 1937, c October 30 at Seattle according to word received at the I from Dr. Robb's son, Bruce. During the years that Dr headed Business Research at the University, 28 bulletin published in the series of "Nebraska Studies in Business authored a number of the bulletins, including Business Rese Its Nature and Objectives, which was long regarded as a def differentiation of business research from other economic ir gation. Dr. Robb resigned from the University to take a p with the Federal Reserve Bank of Kansas City. He was for a ber of years on the faculty of William Jewell College wh continued to do a great deal of research and writing. Frie the family may wish to write to Bruce Robb at 6520 N.E Seattle, Wash. 98115.